



H T T P : / / A T T R A S O F T . C O M
Neural Net Software Company

JFW

“Image Recognition Experts”

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United State Patents and Trademark Office
Commissioner For Patents
P. O. Box 1450
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Application NO. 10/078,299 /

Name of Applicant: Ying Liu

Name of Examiner: Rosario, Dennis

Date of Interview: NA

Type of Interview: NA

Name of Participants: Dennis Rosario (examiner), Ying Liu (applicant)

Exhibit: NA

Specific Prior Art: NA

Dear Dennis,

Summary:

- (1) Only two claims (14 and 19) are left in this response;
- (2) All syntax corrections are made as you have suggested in the remaining two claims.

These correction are made:

1. No correction is required.
2. All Figure descriptions are removed.
3. Comments on 2. No correction is required.
4. No correction is required.
5. Corrections are made as suggested for claim 14. Claims 15, and 16 are deleted.
6. 35 U.S.C 101. No correction is required.
7. Corrections are made as suggested.
8. No correction is required.
9. Claim 11 is deleted.
10. Claim 14 is deleted.

11. Claim 15 is deleted.
12. Comments. No correction is required.
13. 35 USC 102. No correction is required.
14. Claim 11 is deleted.
15. Claim 16 is deleted. For Claim 14, see item 10 above.
16. 35 USA 103. No correction is required.
17. Claim 15 is deleted.

18. Again, just because two inventions use the same keyword, which is really the only connection, does not make them the same.

Demitrova, et al uses Markov Chain to a sequence of images in object tracking. This invention uses Markov for the interval evolution of a Markov Chain with a given image as the initial configuration. The connection is like “a car has a round wheel, an airplane has a round cross section”. The quoted trajectories are different in two inventions; one trajectory (Demitrova, et al) is the tracking of an object between image frames; while the other (this invention) is the self-evolution of a Markov from an initial configuration to its invariant configuration with an image as an initial configuration, which does not involve objects in an image and does not involve multiple images.

As to the second argument, the examiner should know the APN algorithm is fundamentally an ABM algorithm extension, with binary neurons replaced by multiple valued neurons. The examiner’s argument is more related only to Claim 15 and has failed to establish the link between Huang et al and the ABM algorithm. The distance between images used in Claim 19 is not an invention to be claimed; the distance is used to modify the matching score in the ABM matching algorithm, i.e. the distance is a tool used in the algorithm. Claim 19 never intended to claim the application of Hausdorff distance between images. The examiner did not establish a link between Huang et al and the ABM algorithm, which is required before you can further link Huang et al to the APN algorithm. The argument used, the Hausdorff distance between images is exactly the same as the Claim 15. Obviously, I made the claim earlier than him, because my claim was made in 2001. Nevertheless, I will withdraw Claim 15. There is no connection, however, between your argument and the Claim 19.

19. Three month. No correction is required.
20. Instruction. No correction is required.

Thanks again for your help.
With Kindest Regards,



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United States Patent



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Name of Examiner: Rosario, Dennis

Name of Participants: Dennis Rosario (examiner), Ying Liu (applicant)

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Total Claims 28

Attrasoft Image Retrieval

Inventor: Ying Liu, Savannah, GA

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Appendix A. Accompanying Application Document and CD

1. Two CD's Labeled "Document, Sample Implementation"

A. The disks contain only three **ASCII** files.

B. Each disk in the duplicate set is identical.

C. Contents of the CD:

File Name	Type	Size	Date	Description
ABM4_9	TXT	156,256	05-16-02	Detailed description of ImageFinder 4.9
ABM5_0	TXT	96,515	05-16-02	Detailed description of PolyApplet 5.0
ABM5_1	TXT	43,019	05-16-02	Detailed description of TransApplet 5.1

D. These documents are Copyrighted:

ImageFinder 4.9: TX 5-385-330

PolyApplet 5.0: Pending

TransApplet 5.1: Pending

E. Interpretation: These three files will give detailed descriptions of the three sample implementations:

Detailed description of ImageFinder 4.9

Detailed description of PolyApplet 5.0

Detailed description of TransApplet 5.1

2. Two copies of the coil bound manual labeled "User's Guide, Attrasoft ImageFinder 4.9".

These are two hard copies of the User's Guide for Attrasoft ImageFinder 4.9.

3. Two CD's Labeled "Attrasoft ImageFinder 4.9"

A. The disks contain only **non-ASCII** files. The CD contains two types of files:

(A1) Installation file, which will install the following executable files to a computer with Microsoft Windows as the operating system:

- Attrasoft ImageFinder 4.9 for Windows 95/98/ME, execution files;
- Attrasoft ImageFinder 4.9 for Windows 2000/XP, execution files;

- Data File for running the software;
- User's Guide in Microsoft Word, and
- User's Guide in html format.

(A2) A set of executable files running from the CD with Microsoft Windows as the operating system:

- Attrasoft ImageFinder 4.9 for Windows 95/98/ME, execution files;
- Attrasoft ImageFinder 4.9 for Windows 2000/XP, execution files;
- Data File for running the software;
- User's Guide in Microsoft Word, and
- User's Guide in html format.

B. The Operating System is Windows 95, 98, ME, 2000, and XP.

C. Each disk in the duplicate set is identical.

D. Contents of the CD:

Not all contents are listed, because there are too many files. The two data directories, for example, contain more than 80,000 files. The Date information is not accurate due to the date setting of the computer, which creates these files.

Root Directory Contents:

File Name	Type	Size	Date	Description
DISK1	ID	5	01-05-90 9:31p	Installation File
DISK10	ID	5	01-05-90 9:31p	Installation File
DISK11	ID	5	01-05-90 9:31p	Installation File
DISK12	ID	5	01-05-90 9:31p	Installation File
DISK13	ID	5	01-05-90 9:32p	Installation File
DISK14	ID	5	01-05-90 9:32p	Installation File
DISK2	ID	5	01-05-90 9:32p	Installation File
DISK3	ID	5	01-05-90 9:32p	Installation File
DISK4	ID	5	01-05-90 9:33p	Installation File
DISK5	ID	5	01-05-90 9:33p	Installation File
DISK6	ID	5	01-05-90 9:33p	Installation File
DISK7	ID	5	01-05-90 9:33p	Installation File

DISK8	ID	5	01-05-90 9:34p	Installation File
DISK9	ID	5	01-05-90 9:34p	Installation File
SETUP	EXE	47,616	01-05-90 9:31p	Installation File
SETUP	INI	32	01-05-90 9:31p	Installation File
SETUP	INS	147,449	01-05-90 9:31p	Installation File
SETUP	ISS	510	01-05-90 9:31p	Installation File
SETUP	PKG	15,061	01-05-90 9:31p	Installation File
INST32I	EX	306,666	01-05-90 9:31p	Installation File
_ISDEL	EXE	8,192	01-05-90 9:31p	Installation File
_SETUP	1	721,623	01-05-90 9:31p	Installation File
_SETUP	10	1,454,681	01-05-90 9:31p	Installation File
_SETUP	11	1,455,574	01-05-90 9:31p	Installation File
_SETUP	12	1,455,468	01-05-90 9:31p	Installation File
_SETUP	13	1,454,113	01-05-90 9:32p	Installation File
_SETUP	14	1,074,165	01-05-90 9:32p	Installation File
_SETUP	2	1,454,796	01-05-90 9:32p	Installation File
_SETUP	3	1,456,887	01-05-90 9:32p	Installation File
_SETUP	4	1,455,245	01-05-90 9:33p	Installation File
_SETUP	5	1,455,918	01-05-90 9:33p	Installation File
_SETUP	6	1,455,206	01-05-90 9:33p	Installation File
_SETUP	7	1,453,720	01-05-90 9:33p	Installation File
_SETUP	8	1,455,603	01-05-90 9:34p	Installation File
_SETUP	9	1,456,571	01-05-90 9:34p	Installation File
_SETUP	DLL	10,752	01-05-90 9:31p	Installation File
_SETUP	LIB	196,219	01-05-90 9:31p	Installation File
ABM49	<DIR>		06-08-01 1:04p	Executable File
USPTO72	<DIR>		02-28-01 7:15p	Data File
USPTO74	<DIR>		05-21-01 4:33p	Data File

E. Interpretation of the files

(E1) Files labeled “Installation File” are used to install the following executable files to a computer with Microsoft Windows as the operating system:

- Attrasoft ImageFinder 4.9 for Windows 95/98/ME, execution files;
- Attrasoft ImageFinder 4.9 for Windows 2000/XP, execution files;
- Data File for running the software;
- User's Guide in Microsoft Word, and
- User's Guide in html format.

To install the software to a Personal Computer using Windows, double click the setup.exe file.

(E2) The directories, labeled "Data", contain the data files to run the software. There are more than 80,000 files in the two directories, so they will not be listed.

(E3) The directories, labeled "Executable", contain the executable file to run from the CD.

Directory Contents:

File Name	Type	Size	Date	Description
50X50	<DIR>		06-08-01 1:04p	Data File
ABM49_2K	EXE	385,536	06-08-01 11:54a	Executable
ABM_A1	BMP	25,182	08-31-99 11:02p	Executable
DEISL1	ISU	47,058	06-08-01 1:05p	Executable
IMAGEF~7	<DIR>		06-08-01 1:04p	Data File
_ISREG32	DLL	24,576	02-07-96 8:07a	Executable
ABM48	TXT	79	06-08-01 12:26p	Executable
ABM48_1	TXT	6	03-23-01 9:20a	Executable
ABM48_2	TXT	6	03-23-01 9:21a	Executable
ABM48_3	TXT	6	03-23-01 9:21a	Executable
ABM48_4	TXT	6	03-13-01 2:28p	Executable
ABM48_5	TXT	6	03-13-01 2:28p	Executable
ABM48_6	TXT	6	03-13-01 2:28p	Executable
ABM48_7	TXT	6	03-13-01 2:28p	Executable
ABM48_8	TXT	6	03-13-01 2:29p	Executable
ABM48_9	TXT	6	03-13-01 2:29p	Executable
ABM49	EXE	386,048	06-08-01 10:53a	Executable
ABM4_9	DOC	3,598,336	06-07-01 10:52a	User's Guide, Word
FBI	<DIR>		06-08-01 1:04p	Data File

FINAL	<DIR>		06-08-01 1:04p	Data File
HELP	<DIR>		06-08-01 1:04p	User's Guide, html
LOCK_~15	<DIR>		6-08-01 1:04p	Data File
LOCK_~17	<DIR>		06-08-01 1:04p	Data File
NOTES	TXT	140	03-23-01 10:33a	Executable
OBLIQUE	<DIR>		06-08-01 1:04p	Data File
STAMP	<DIR>		06-08-01 1:04p	Data File
USPTO	<DIR>		06-08-01 1:04p	Data File

The interpretation of this subdirectory:

- The directories, labeled “Data”, contain the data files to run the software.
- The directory, labeled “User’s Guide, html”, contains the user’s guide files in html format.
- The file, labeled “User’s Guide, Word”, contains the user’s guide files in html format.
- The files, labeled “Executable”, contain the executable files for Windows 95/98/ME/200/XP.

4. Two copies of the coil bound manual labeled “User’s Guide, Attrasoft TransApplet 5.1”

These are two hard copies of the User’s Guide for Attrasoft TransApplet 5.1.

5. Two CD’s Labeled “Attrasoft TransApplet 5.1”

A. The disks contain only **non-ASCII** files. The CD contains the following files:

- Attrasoft TransApplet 5.1 software library for Windows 95/98/ME/2000/XP, COM/DLL file format;
- Sample Implementation Codes;
- User’s Guide in Microsoft Word, and
- User’s Guide in html format.

B. The Operating System is Windows 95, 98, ME, 2000, and XP.

C. Each disk in the duplicate set is identical.

D. Contents of the CD:

Root Directory Contents:

File Name	Type	Size	Date	Description
ABM5_1	DOC	616,448	10-21-01 11:28a	User's Guide, Word
CHAP3	<DIR>		10-19-01 4:31p	Examples
CHAP4	<DIR>		10-19-01 4:31p	Examples
CHAP5	<DIR>		10-19-01 4:31p	Examples
CHAP6	<DIR>		10-19-01 4:31p	Examples
CHAP7	<DIR>		10-19-01 4:32p	Examples
FBI	<DIR>		06-08-01 1:04p	Examples
HELP	<DIR>		10-19-01 4:40p	User's Guide, Word
OBLIQUE	<DIR>		06-08-01 1:04p	Examples
README	TXT	567	10-20-01 10:51a	readme.txt
TRANS~26	DLL	282,112	0-21-01 11:00a	COM DLL

E. Interpretation of the files

- (E1) The file labeled "COM DLL" is the COM DLL software library file to be used by users.
- (E2) The directories, labeled "Examples", contain the examples of how to use the COM DLL.
- (E3) The files, labeled "User's Guide, Word" and the directory, "User's Guide, html", contain the User's Guide.

6. Inventor's Resume'.